A File/Object/Model Naming Convention

A Preliminary Draft

Goal: to outline a structured naming convention that can be used by projects for the development of model and object names for all information produced in the development of a product or service; the methodology will unique object names that are human readable and machine interrogable.

Scope: the naming convention outlined can be used during all aspects of product and service development and implementation.

Naming Structure:

The naming convention consists of three naming components - a **DATATYPE**, a **DESCRIPTOR** and a MIMETYPE. A standard name is structured as:

DATATYPE_DESCRIPTOR.MIMETYPE

Component Definitions:

DATATYPE - a generic document, model or object category; specifies the *what* associated with the object/model/file being named i.e. specifies the generic category of the object/model/file

e.g. MODEL, DRAWING, MEMO, IMAGE, ECR, PFR, SCHEDULE, BUDGET, PLAN, etc.

DESCRIPTOR - provides specific information describing the object/model/document being named; specifies the *who* and *when* associated with the object being named.

The **DESCRIPTOR** component may be divided into sub-components separated by underscores [_].

e.g. a **DESCRIPTOR** can include the initiators' initials, a date and a revision number/letter.

The elements within a **DESCRIPTOR** component may vary between different **DESCRIPTOR**, but must be consistent within **DESCRIPTOR**

- some **DESCRIPTOR** have revision levels (models, drawings, etc.) and some don't (Memos, Presentation Slides, etc.)
- **DESCRIPTORS** that don't have revision levels should include a data in the **DESCRIPTOR** field using the following convention YYYY-MM-DD e.g. 1997-10-25 for October 25, 1997.

MIME TYPE - the file extension that follows the standard implemented on the Internet and outlined in RFC 2184; specifies ***how*** a file/object/model is created and viewed.

Naming Rules:

1. Underscore [_] is used to separate naming components and sub-components.
2. Hyphens [-]used to separate words within components or sub-components.
3. Characters that can and cannot be used in a standard file/object model name:

Any (US-ASCII) CHAR ***except*** SPACE, CTLs, or 'tspecials'

tspecials = "(" / ")" / "<" / ">" / "@" / "," / ";" / ":" / "\" / <">
/ "/" / "[" / "]" / "?" / "." /

Note: the definition of "tspecials" is the same as the RFC 822 definition of "specials" with the addition of the three characters "/", "?", and "=".

Examples:

Data Type	Naming Structure	Example
Requirements Model	MODEL_REQ_model-name_rev.mime-type	MODEL-REQ_Power_C.FSM
Interface Control Dwg	ICD_dwg-no_rev.mime-type	ICD_10119826_B.DWG
Mechanical Part Model	MODEL-MECH_model-no_rev.mime-type	MODEL-MECH__C.FSM
Eng Change Request	ECR_ecr-no_rev.mime-type	ECR_88645_B.HTM
Inter-office Memo	IOM_iom-number_date.mime-type	IOM_JOE23_960723.HTM
Schedule	SCH_schedule-element_rev.mime	SCH_Reviews_B.XLS
Budget	BUDGT_WBS-element_rev.mime-type	BUDGT_2004_C.XLS
Specification	SPEC_spec-no_rev.mime-type	SPEC_DS109_G.PDF
Bill of Materials	BOM_ReferenceDesignator.mime-type	BOM_2001B5648.XLS
Presentation Slides	SLIDES_Presentation.mime-type	SLIDES_DBAT-Del3.PPT

Same data in different formats:

Bill of Materials	BOM_2001B5648.XLS	Excel Spreadsheet (Native - Reusable)
	BOM_2001B5648.PDF	Adobe Acrobat Format (Neutral - Viewable)
	BOM_2001B5648.DWG	Autocad Format (Native - Reusable)
	BOM_2001B5648.STEP	STEP AP203 Format (Neutral - Reusable)

Implementation and Conversion Considerations:

- configure tools to outline names according to the convention
- encapsulate existing file names into the descriptor section of the structured name. Use existing extension as the MIME Type if possible.
- use an object naming service to validate and enforce a naming convention